

Southeastern Center of Excellence in Vector Borne Diseases The Gateway Program

NEWSLETTER

SPRING & SUMMER 2023

Important Announcements



The Southeastern Center of Excellence will be holding its annual meeting on January 17th and 18th, 2024 at the University of South Carolina in Columbia, South Carolina. It will be a hybrid event with more details to follow.



Our annual DODD Fellowship Opportunity is NOW OPEN. SECVBD will be supporting individuals with \$1,000 fellowships to put toward registration, course costs, and travel. The application can be found here or on our website. Applications close December 4th, 2024.

Featured Recent Publications

E. J. Norris and J. R. Bloomquist
(2023) Fir needle (Abies
balsemaea) essential oil
enhances the speed of action of
select insecticides.

Mappin F, Bellantuono AJ, Ebrahimi B, DeGennaro M. Odor-evoked transcriptomics of Aedes aegypti mosquitoes. PloS one. 2023. Under review.

Evidence of Permethrin
Resistance and Fipronil
Tolerance in Rhipicephalus
sanguineus s.l. (Acari:
lxodidae) Populations From
Florida and California
Yuexun Tian, Caitlin E
Taylor, Cynthia C Lord,
Phillip E Kaufman





Highlight of Recent Training Activities



TICK UNIVERSITY 2023

May 31st-June 2nd SECVBD hosted its annual hands-on training developed for students, public health officials, and vector control professionals looking for practical introduction to ticks and tickborne pathogen surveillance. This training provided information on tick identification, ecology, and associated pathogens, as well as field and laboratory practicums. This year we had 20 amazing attendees!

CONGRESSO DE SALUD E INVESTIGACIÓN

This October members of the SECVBD team, Dr. Keira Lucas (Collier Mosquito Control District), Mr. Richard Ryan (Collier Mosquito Control District), and Dr. Lídia Gual Gonzalez (University of South Carolina) presented educational lectures at the two day Congresso De Salud E Investigación in San Juan, Puerto Rico and Ponce, Puerto Rico in collaboration with the Puerto Rican Vector Control Unit.



2023 SECVBD SUMMER INTERNSHIP PROGRAM

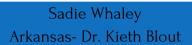
Each summer we support interns across the Southeast; these interns spend the summer practicing hands-on experience in tick and mosquito collection, storage, and identification. Continue to the next page to learn a little more about some of these interns!



Meet the Interns!

Carlos Sankone Alabama- Dr. Meghan Hermance

Carlos is a biology M.s.C student at the University of South Alabama. His research focuses on studying long-term spatiotemporal changes in the aquatic insect diversity of the unique coastal streams that drain into America's Amazon - the Mobile-Tensaw River Delta (MTD). Carlos says "being able to work with the SECVBD on ticks has improved my overall understanding of how invertebrates can have unique, and often troublesome, relationships with humans. Particularly, I've enjoyed learning more about vector and disease ecology over the summer!" Carlos plans to pursue his PhD focusing on amphibian ecology and conservation in Australia.



Sadie is currently a Junior in College, she says "[T]he most valuable information I learned from my internship was utilizing other people's experience and knowledge to answer and create more questions for my research". In the future Sadie intends on completing her Biochemistry/Biology degree and pursuing a career as a medical doctor.

Bradley Roberts South Carolina- Dr. Brian Byrd

Bradley is currently a rising sophomore at Western Carolina University. From his internship this summer Bradley learned "different field methods to collect mosquitoes and molecular techniques including DNA isolation, DNA quantification, and PCR. However, throughout my internship experience, one of the more invaluable things I learned is what some of the public health concerns for my community are. I'm extremely grateful for the opportunity to learn more about how La Crosse encephalitis is impacting my community, and the knowledge of how to help address some of them as well". Bradley is intending to become a general physician and use this knowledge to help care for his community in rural western North Carolina.



Robert Rodriguez-Gonzalez Florida- Dr. Rhoel Dinglasan

Robert is currently an assistant professor from the Public Health Program at Ponce Health Sciences University and a staff member from the University of Florida. The most valuable piece of information Robert learned was "classification of vectors, infection and dissection of mosquitoes, RNA extractions, performing RT-qPCR, cell culture, and viral titration". Robert plans to train students at Ponce Health Sciences University and implement all the concepts learned.

Dr. Jimmy Wiendcamp Georgia- Dr. Rosmarie Kelly

Dr. Weindcamp is currently a professor of Biology at University of Georgia. Dr. Weindcamp is a professor at a small teaching/transfer university where opportunities for research in entomology are limited. Dr. Weindcamp states "The use of the tick bot is a novel idea. This application of entomology/technology to help people is exciting".

Devon Bayham

Tennessee- Dr. Abelardo Moncayo
Devon is currently going into his 3rd year of undergraduate
studies, he plans to finish his environmental studies degree
and possibly study environmental health and geography.
Devon says the best part of his internship was "learning
more about how diseases and pathogens can spread.
Additionally, how environmental factors can slow down or
speed up how fast they spread".





Careers & Opportunities

Assistant Scientist II

Center for Vector Biology & Zoonotic Diseases at the Connecticut Agricultural Experiment Station

Post Doctoral Scientist

Center for Vector Biology & Zoonotic Diseases at the Connecticut Agricultural Experiment Station

Teaching & Learning Training Specialist

Training and Evaluation Center (VectorED Network)

<u>Pesticide Field Manager</u>

North Carolina Dept of Agriculture & Consumer Services

<u>Director of Mosquito and</u> <u>Vector Surveillance</u>

Richmond County Mosquito Control (GA)

<u>Laboratory Manager</u>

Sorrells Lab, Yale University

AMCA Social Media Coordinator

Apply or Nominate here.

<u>Senior-level Research</u> <u>Biologist</u>

Manatee County Mosquito Control District

PACVEC Seminar

November 28th 12:00PM- 1:00PM

FMCA "Tallahassee Days"

January 22-23, 2024

FMCA DODD Short Courses

January 29- February 1, 2024

American Mosquito Control Association Meeting

March 4-8, 2024

Tennessee Mosquito and Vector Control Association

February 22-23, 2024

NEVBD Master of Science in Entomology: VBD Biology Deadline to apply: Dec. 1st, 2023

SECVBD Online Mosquito

<u>Training Program</u>

SECVBD Online Tick Training

<u>Program</u>







